

Date: 30 November 2009

SWITCHING SYSTEMS
 P O BOX 33457
 JEPPESTOWN
 4067

IA CERTIFICATE: SABS MS/09-636A X

MP130/GBP4; MP130 (DIN HOUSING) AND MSR9 NI PILOT RELAY
 (INTRINSICALLY SAFE)
 Page 1 of 2

Expiry Date: 30 November 2019

DESCRIPTION

There were three types of pilot relays:

- a) MP 130 / GBP4
- b) MP130 (DIN Housing)
- c) MSR9 NI

Each of the above pilot relays were in turn available in three different input supply models:

- 1) 110V rms supply
- 2) 220V rms supply
- 3) 525V rms supply

The pilot relay was intended to be located in a safe area / flameproof enclosure. This report only covers the intrinsic safety of the output of the pilot relay.

MARKING

MP130/ GBP4 NI	MP130 (DIN HOUSING)	MSR9 NI
<p>Type: MP130/ GBP4 NI Manufacturer: Switching Systems (Pty) Ltd Classification: [Ex ib] I / IIC I.A. No. SABS MS / 09-636AX</p> <p>Safety parameters: Um = 110V / 220V / 525V rms Maximum input current = 100mA Uo = 24.2V Io = 81.5mA Po = 0.5W Co = 122nF Lo = 6mH</p>	<p>Type: MP130 (DIN HOUSING) Manufacturer: Switching Systems (Pty) Ltd Classification : [Ex ib] I / IIC I.A. No. SABS MS / 09-636AX</p> <p>Safety parameters: Um = 110V/220V/ 525V rms Maximum input current = 100mA Uo = 24.2V Io = 81.5mA Po = 0.5W Co = 122nF Lo = 6mH</p>	<p>Type: MSR9 NI Manufacturer: Switching Systems Classification: [Ex ib] I / IIC I.A. No. SABS MS / 09-636AX</p> <p>Safety parameters: Um = 110V/ 220V/ 525V rms Maximum input current = 100mA Uo = 24.2V Io = 81.5mA Po = 0.5W Co = 122nF Lo = 6mH</p>

SABS COMMERCIAL (Pty) Ltd – Reg. No. 2000/013581/07
 Directors: Mr MJ Kuscus, Ms TA Cooper, Dr T Demana, MS B Mosako, Mr LR Pitot, Mr A Mabizela, Dr GR Visser
 Website: www.sabs.co.za E-mail: info@sabs.co.za

Gauteng Head Office
 1 Dr Lategan Road, Groenkloof
 Private Bag X191
 Pretoria, 0001
 Tel: +27 (0) 12 428 7911
 Fax: +27 (0) 12 344 1568

Western Cape:
 Liesbeek Park Way, Rosebank
 PO Box 615, Rondebosch,
 Cape Town, 7701
 Tel: +27 (0) 21 681 6700
 Fax: +27 (0) 21 681 6701

Eastern Cape:
 30 Kipling Road (cnr. Diaz and Kipling
 Roads). PO Box 3013, North End,
 Port Elizabeth, 6056
 Tel: +27 (0) 41 391 8400
 Fax: +27 (0) 41 391 8427

Kwazulu-Natal:
 15 Gath Road, Waterfall Park
 PO Box 30087,
 Mayville, 4058
 Tel: +27 (0) 31 203 2900
 Fax: +27 (0) 31 203 2907

X - Special conditions of safe use

All safety parameters of the equipment shall be adhered to when connecting equipment to as part of an intrinsically safe system.

The contacts of the relay in normal operation shall not exceed their manufacturer's rating and shall not switch more than the nominal value of 5A r.m.s or 250 r.m.s or 100VA.

Compliance: The units as described above and examined in SABS report 2335/09-636A is hereby certified "Explosion Protected [Ex ib] I/IIC" and is provides an output suitable for use in hazardous locations as stated below, as determined during inspections conducted in accordance with the relevant requirements of SANS Standards:

SANS 60079-0: 2005 "Electrical apparatus for explosive gas atmospheres Part 0: General requirements"

SANS 60079-11: 2007 "Explosive atmospheres Part 11 Equipment protection by intrinsic safety 'i'"

Locations	Zone 1, 2	Underground/Surface
Hazardous Frequency		Intermittent as could occur under normal operations
Environment	Group I/IIC	Methane/ Hydrogen
Limiting Temperature	Not applicable	
Ambient Temperature	Not applicable	

The use of the apparatus in hazardous locations is subject to the following provision, which shall be adhered to:

- i) SANS 10086 requirements;
- ii) Any relevant requirements of the MHS Act or the OHS Act;
- iii) Codes of Practice enforced in terms of Regulations 21.17/2 of the Minerals Act, by the Chief Inspector of Mines;
- iv) Any restrictions and conditions enforced by the Chief Inspector of Mines, Principal Inspector (Group I equipment) or Chief Inspector of Factories (Group II equipment); and
- v) Any conditions mentioned in the above test report.



R Papiah: MANAGER (TECHNICAL SIGNATORY)



T Matsobe: TEST OFFICER

SABS EXPLOSION PREVENTION TECHNOLOGY